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|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 10/650,274             | GLENN ET AL.        |  |
|                               | Examiner               | Art Unit            |  |
|                               | Malgorzata A. Walicka  | 1652                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to June 26/06/06.
2.  The allowed claim(s) is/are 18, 21 -23, 27, 30 and 33.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All b)  Some\* c)  None of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 12/16/04
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

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Amendment and Reply filed June 26, 2006 is acknowledged. Claims 5-6, 16-17, 19 and 24 have been previously cancelled. Claims 23 and 27-33 have been currently amended. Claims 1-4, 7-15, 18-23 and 25-33 are pending. Claims 18, 21-23 and 27-33 directed to an isolated polypeptide of SEQ ID NO: 172 and its compositions are under examination. Claims 1-4, 7-15, 20 and 25-26 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

## DETAIL ACTION

### 1. Objections

Objections to claims 23 and 27-33 made in the previous action are withdrawn, because the claims have been amended.

### 4. Rejections

#### 4.1. 35 USC section 101

Claim 18, 21-23 and 27-33 were rejected under 35 U.S.C. 101 in the previous action because the claimed invention was not supported by either a specific and substantial asserted utility or a well-established utility.

The Declaration of Dr. James Dekker, under 37 CFR 1.132 filed June 26, 2006 is sufficient to overcome the rejection of claim 18, 21-23 and 27-33 under 35 U.S.C. 101 and under 35 USC § 112, the first paragraph, based upon lack of support of either a specific or substantial asserted utility or a well established utility. Dr. James Dekker provides evidence in Table 1 of the Declaration that the polypeptide of SEQ D NO: 172

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having asserted utility as pyruvate oxidase indeed possesses the enzymatic activity of pyruvate oxidase.

#### 4.3. 35 USC section 112, first paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

##### 4.3.1. Lack of written description

Claims 22 and 27-33 were rejected under paragraph 35 U.S.C. 112 in the previous office Action. The rejection is withdrawn, because The Declaration of Dr. James Dekker, under 37 CFR 1.132, is sufficient and Applicatns' argument are found persuasive.

#### 5. Examiner's amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

##### In the claims

Please cancel claims 1-4, 7-15, 20, 25-26, 28-29 and 31-32.

Authorization for this examiner's amendment was given in a telephone interviews with Applicants' representative Janet Sleath on Sept. 12 and Sept. 15, 2006.

## **6. Conclusion**

Claims 18, 21, 22, 23, 27, 30 and 33 are allowed. The following is the examiner's reason for allowance. Applicants are the first to disclose a new pyruvate oxidase from *Lactobacillus rhamnosus* encoded by polynucleotide of SEQ ID NO:73 and having amino acid sequence of SEQ ID NO:172. No prior art fairly suggest the enzyme. The enzyme is useful, for example, in metabolic engineering of microorganisms used in fermentative production of many chemicals, particularly in production of flavors and modifications thereof.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malgorzata A. Walicka whose telephone number is (571) 272-0944. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy, can be reached on (571) 272-0928. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Malgorzata A. Walicka, Ph.D.  
Art Unit 1652  
Patent Examiner



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